DOCUMENT RESUME

ED 365 068 EC 302 693

AUTHOR Wolfberg, Pamela; Schuler, Adriana

TITLE A Case Illustration of the Impact of Peer Play on

Symbolic Activity in Autism.

PUB DATE Mar 93

NOTE 13p.; Paper presented at the Annual Meeting of the

Society for Research in Child Development (60th, New

Orleans, LA, March 25-28, 1993).

PUB TYPE Speeches/Conference Papers (150) -- Reports -

Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS *Autism; Blacks; Case Studies; Children; Cognitive

Development; *Cognitive Processes; Dramatic Play;

*Intervention; Outcomes of Treatment; Peer Relationship; Play; *Pretend Play; Qualitative

Research; *Social Behavior

IDENTIFIERS African Americans; Theory of Mind

ABSTRACT

This study presents a qualitative description of changes in social and symbolic behaviors in an African-American girl with autism over a period of 10 years (from age 5 to 15 years), with emphasis on ages 9 to 11. The primary purpose of the investigation was to elucidate the process ultimately leading to reciprocal social relations and symbolic representation, and to understand the context that supported this change. Dramatic changes were observed during the time she participated in a peer play intervention, including advances from isolated to socially coordinated play with peers; presymbolic to imaginative play activity; and parallel symbolic transformations in spoken language, written language, and drawing. The study concluded that reciprocity, communicative interaction, and symbolic imagery in play and related representational activity emerged when the child was provided with sufficient social support. The case study suggests that autistic children's awareness of other people's mental states and intentions may be enhanced through guided play experiences, and deficits in symbolic operations commonly ascribed to autism may be better explained as secondary to social isolation rather than as basic cognitive deficiencies. (Contains 11 references.) (JDD)



^{*} Reproductions supplied by EDRS are the best that can be made * from the original document.

Society for Research in Child Development March 25-28, 1993 New Orleans, Louisiana

U.S. DEPARTMENT OF EDUCATION

""" e uf Educational Research and Improvement

EDUCATIONAL RESOURCES INFORMATION

CENTER (ERIC)

- In a document has been reproduced as received from the person or organization originating it.
- . Minor changes have been made to improve reproduction quality.
- Pernts of view or opinions stated in this document duringt necessarily represent official OE Riliposition or policy.

A Case Illustration of the Impact of Peer Play on Symbolic Activity in Autism

Pamela Wolfberg

Joint Lotoral Program

University of California, Berkeley/San Francisco State University

Adriana Schuler Professor of Special Education San Francisco State University

?

BEST COPY AVAILABLE

MATERIAL WAS PEEN GRANTED IN

THE HAPPY AT CRAL RESCRIPTION OF THE SERVICE OF THE

Abstract

Qualitative impairments in reciprocal social interaction and imaginative play are hallmarks of the syndrome autism. This study presents an in depth qualitative description of changes in social and symbolic behaviors in an African-American girl with autism over a period of ten years (from 5 to 15 years). Dramatic changes were observed during the time she participated in a peer play intervention. Findings include advances from isolated to socially coordinated play with peers, pre-symbolic to imaginative play activity, and parallel symbolic transformations in spoken and written language, and drawing. Finding are discussed in terms of theories of autism and intervention issues.



Introduction

Qualitative impairments in reciprocal social interaction, imaginative activity, and a markedly restricted repertoire of activities and interests are viewed as hallmarks of the syndrome early childhood autism (American Psychiatric Association: DSMIII-R, 1987; Wing & Attwood, 1987), and are all reflected in the commonly noted lack of spontaneous play. The play of children with autism is typified as sterile, ritualistic and void of social engagement (Lord, 1984; Wing, Gould, Yeates & Brierly, 1977). Paucity of imaginative play is consistent with recent research findings dealing with metarepresentational skills in children with autism (Baron-Cohen, Leslie, & Frith, 1985; Baron-Cohen, 1989). An appreciation of the mental states of others is critical to pretend play, but it is not clear whether the documented deficiencies are the result of social isolation or constitute a fundamental deficit. It would be important to clarify (1) whether social interaction and imaginative thought could emerge when sufficient social support is provided, and (2) the interrelations between social interaction and advances in representational activity across various symbolic domains.

This paper presents a case illustration of the impact of a peer play intervention on social relations and symbolic activity in an African-American girl with autism given the pseudonym, Teresa. The primary purpose of this investigation was to elucidate the process ultimately leading to reciprocal social relations and symbolic representation, and to understand the context that supported this change. This study followed the evolution of Teresa's development over a ten year time span, from 5 to 15 years of age, with emphasis placed on a two year period during which she participated in a integrated play groups from 9 to 11 years of age (Wolfberg & Schuler, in press) (see Table 1 for a description of the integrated play groups model). The first six months of this period marked the emergence of advanced social behaviors and symbolic representational abilities.



Research Design and Methodology

Case Illustration

An ethnographic interpretive case study examined longitudinal concomitant changes in social and symbolic forms of play, language, writing, and drawing in Teresa (LeCompte & Goetz,1984; Merriam, 1988; Runyan, 1982; Yin, 1989). The principal investigator collected most of the data as a participant observer in the field.

<u>Case Participant.</u> Psychological reports indicate that Teresa had been independently evaluated and diagnosed as conforming to Rutter's (1978) diagnostic criteria for autism: onset in early childhood, impaired social development, disturbance of language and cognitive skills, and an insistence on sameness.

Peer Play Context. Videotapes of bi-weekly integrated play groups sessions documented the following three conditions: (1) "no adult guidance" whereby no adult intervention was provided for a two month period (2) "guided participation" whereby an adult provided support for a two month period (3) "peer mediated" whereby adult guidance was withdrawn for a two month period.

Data Collection and Analysis

Employing inductive procedures (Glaser & Strauss, 1967; Miles & Huberman, 1984), data collection and analysis progressed intermittently. Descriptive, interpretive, and evaluative techniques were used to explore interrelationships and construct theory emerging from the data. Triangulation involving the cross-validation of multiple theoretical schemes, methodologies, data sources, and investigators insured rigor and credibility of the study (Denzin, 1978).

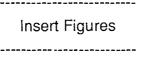
<u>Data Sources.</u> (1) videotapes of integrated play group sessions (2) videotapes of school related activities (3) writing samples (4) drawing samples (5) interview transcripts with Teresa, teachers, family members and peers, and (6) process notes detailing school progress (7) school documents.

<u>Data Reduction Activities.</u> Analysis involved transcribing and coding videotaped play sessions, and ordering, classifying and comparing the recorded data within and across other data sources. Guided by theories, further data reduction and analysis took place as themes emerged from patterns and relationships gleaned from the data.



Summary of Case Study Findings

Within the parameters of Teresa's (1) social relations with others, (2) transformations in play, and (3) transformations in words and pictures, the case study analysis documented (a) progressions in social development from isolation to peripheral and fleeting encounters, to coordinated and sustained social interactions with peers, (b) symbolic transformations from repetitive and simple object manipulations, to elaborate, flexible, novel, and imaginative play schemes, and (c) parallel symbolic transformations in spoken and written language, and drawing (see Table 2). Supported by samples of Teresa's play, language, writing and drawing, the following illustration summarizes the progression of these associated changes.





Discussion

The accumulated findings have implications not only for purposes of intervention but also for our theoretical understanding of the syndrome autism. When Teresa was provided with sufficient social support, reciprocity, communicative interaction, and ultimately, symbolic imagery in play and related representational activity emerged. The case study suggests that autistic children's awareness of other people's mental states and intentions may be enhanced through guided play experiences. Deficits in symbolic operations commonly ascribed to the syndrome may be better explained as secondary to social isolation rather than as constituting basic cognitive deficiencies. The contributions of supported peer play experiences to advances in perspective taking and metarepresentation deserve closer attention.

Further investigations would be necessary to determine whether larger scale replications of integrated peer play programs, as presented here, would result in similar gains in symbolic activity and overall sociability including the ability to appreciate the perspectives of others. More extensive research would be needed to questions concerning the interdependence of social support, peer relations, and the various domains of symbolic development. Clarification of these interrelationships is important for determining which approaches are most beneficial to the social integration of children with autism. Moreover, future research would be necessary for elucidating to what extent guided play experiences contribute to the establishment and maintenance of long term peer relationships, including friendships. Play experiences with peers may prove to be a most important vehicle for normalization.



References

- American Psychiatric Association (1987). <u>Diagnostic and statistical manual of mental disorders-III-revised</u>. Washington D.C.: Author.
- Baron-Cohen, S. (1987). Autism and symbolic play. <u>British Journal of Developmental Psychology</u>, <u>5 (2)</u>, 139-148.
- Baron-Cohen, S., Leslie, A. M., & Frith, U. (1985). Does the autistic child have a theory of mind? <u>Cognition</u>, <u>21</u>, 37-46.
- LeCompte, M. D., & Goetz, J. P. (1984). Ethnographic data collection in evaluation research. In D. M. Fetterman (Eds.), <u>Ethnography in education evaluation</u> Beverly Hills,CA: Sage.
- Lord, C. (1984). Development of peer relations in children with autis. 1. In C. L. F. Morrison & D. Keating (Eds.), <u>Applied developmental psychology</u>. New York: Academic Press.
- Merriam, S. B. (1988). Types and uses of case study research in education. In S. B. Merriam (Ed.), <u>Case study research in education</u> (pp. 22-35). San Francisco: Jossey-Bass.
- Runyan, W. M. (1982). <u>Life histories and psychobiography: Explorations in theory and method</u>. New York: Oxford University Press.
- Wing, L., & Attwood, A. (1987). Syndromes of autism and atypical development. In C. Cohen &. A. Donnellan (Eds.), <u>Handbook of autism and pervasive developmental disc; ders</u> New York: John Wiley & Sons.
- Wing, L., Gould, J., Yeates., S.R. & Brierly, L.M. (1977). Symbolic play in severely mentally retarded and autistic children, Journal of Child Psychology and Psychiatry, 18, 167-178.
- Wolfberg, P., & Schuler, A.L. (in press) Integrated Play Groups: A model for promoting the social and cognitive dimensions of play in children with autism. <u>Journal of Autism and Developmental Disorders</u>.
- Yin, R.K. (1989). <u>Case study research: Design and methods</u>. Newbury Park, CA: Sage.



Integrated Play Groups: A model to enhance the social and symbolic dimensions of play

. DEVELOPING A SOCIAL SUPPORT SYSTEM FOR PEER PLAY

Focus on child competence

Child initiations in play are considered a reflection of developmental status rather than a sign of perceived deviance. Acknowledgement of child competence is achieved through a careful appraisal of developmental status as reflected in patterns of object and social play. Guided by assessments, the intervention capitalizes on children's spontaneous initiations through deliberate imitation and scaffolding, allowing children to select desired activities, and selecting activities that correspond to developmental levels and prevailing object schemes.

Guided Participation

The concept of guided participation refers to the adult's role in guiding the children to participate in increasingly socially coordinated and sophisticated play activities in a supportive rather than directive manner. The amount of external support is regulated in a scaffolded fashion; as the children demonstrate increasing competence, the adult gradually removes him/herself and remains on the periphery as a "secure base," readily available to provide support when needed. To facilitate play activities, the adult guides the children to initiate, join, maintain, elaborate and negotiate play routines. Strategies are presented which enable the children to establish a mutual focus by recognizing and responding to subtle cues and spontaneous initiations. Depending upon the interests, developmental status, and experience of play group members, children may move in and out of joint activities with one or more peers. Solitary play activities may also be encouraged from time to time as they are often a natural extension of peer play, and allow children to practice, consolidate, and appropriate newly acquired skills.

Full immersion in play

Children are fully immersed in the total group play experience Rather than arranging for participation in contrived play scripts or discrete "play" tasks, children engage in the whole play experience, even if active participation is minimal. A system of mutual support and collaboration is developed as children just learning to play (novices) take on whatever role they are capable of performing in a larger play context designed by children experienced in play (experts). Children may participate in activities and carry out tasks which they may not as yet fully comprehend. For example, a child who has a particular inclination to manipulate objects through ritualistic banging may incorporate this into a larger play theme of constructing a building with blocks. With the assistance of more capable peers, the child may take the role of a construction worker and hammer the blocks with a play tool. Gradually, the novice is initiated into the culture of children's play as she/he becomes a competent player.

DESIGNING SUPPORTIVE PLAY ENVIRONMENTS

Natural and integrated settings

A natural setting is defined as a location where, given the opportunity, children would naturally play. An integrated setting is defined as a social setting composed of children with diverse abilities, with a higher proportion of children who are socially competent to children who require a high degree of social support. Play programs may be developed in inclusive and integrated school sites, after-school programs, community centers, neighborhood, and home environments.

Well designed play spaces

To enhance participation in play and social interaction, a well designed play space takes into consideration spatial density and size, spatial arrangements, and organization of materials. Play spaces are typically restricted in size while comfortably accommodating small groups of children, clearly defined by boundaries, highly organized with play materials and furniture visibly and physically accessible and logically arranged around themes.

Selection of play materials

To encourage mutually enjoyment among children with diverse interests and abilities, a wide range of constructive and socio-dramatic toys and props are made available. Age-appropriate play materials are selected on the basis of their interactive potential for social play, structure and complexity. Age-appropriateness refers to what the average child of a particular age would enjoy playing with and does not refer to what is commercially sanctioned or typically available in school. Toys representing diversity in terms of gender-roles, cultural values, and abilities are purposely included.

Forming balanced play groups

To enhance play and social relationships with other children, play groups are limited in the number of familiar peers and/or siblings who meet on a regular and consistent basis over an extended period of time. Play groups generally include at least three and not more than five children. Play group members have diverse abilities, with a higher proportion of children who are socially competent to children who require a higher degree of social support. Different configurations of group members in terms of age, developmental status, and gender may promote different types of beneficial play experiences. Attempts should be made to include children who complement one another in terms of interests, styles of interaction, and character.

Establishing a consistent schedule and routine

High degrees of consistency and predictability are achieved through establishing a consistent schedule and carrying out ongoing routines. Visual schedules or calendars may be personalized for each play group member. Opening and closing rituals such as brief plan, review and a simple song at the start and finish of each play session are established. These allow children to exert a sense of control over the environement, anticipate future events and better cope with transitions.

© IPG

Pamela Wolfberg, 1992



(11-15 YEARS) BEYOND PLAY GROUPS		FRIENDSHIPS AND FAMILY Curcle of friends with girls from mainstreamed classes in school Close relations with family members Spends a great deal of time playing with cousins Helps mother care for baby brother	FANTASY IN PLAY • Covert expressions of make-believe in play • Play scripts reflect logical & coherent themes • Plsay scripts incorporate imaginary events
LD	PETR MEDIATED PLAY	ACCEPTANCE AND INCLUSION • Spontaneous initiations more conventional • Less awkward and more skillfull play entry strategies • Continued difficulty understanding social nuances and social perspectives of peers • Increased ability to extend and elaborate socially coordinated play activities	PRETENDING Socio-dramatic play Adopts baby doll Transforms self into role of dolls Reciprocal role-taking with self & doll as agents Ascribes sensations & emotional states to self & doll Uses imaginary props "Echo-play-lia" transforms into spontaneous & flexible pretend Play scripts bound to realistic familiar routines
(9 - 11 YEARS) VENTURING INTO THE WORLD OF CHILDREN'S PLAY	<i>guided рав</i> тстратох	INITIATION INTO PLAY CULTURE • Peers increasingly respond to Terea's spontaneous, idiosyncratic initiations • Peers increasingly extend invitations to Terea to play • Terea demonstrates increased competence in initiating, joining & coordinating play activities with peers	
VEN	ANWGING LIDGE ON	STRUGGLING TO BECOME INCLUDED • Frequent attempts to initiate and join peer play expressed through idiosyncratic means • Awkward & abrupt play entry strategies • Lacks understanding of social nuances & social perspectives of peers • Initiations generally ignored & occasionally rejected by peers • Spends extended periods of time in isolation • Occasional brief unelaborated play episodes with peers	FINDING CONFORT IN RULES AND RITUALS Little spontaneous solivary play • Airrless wandering while watching peers • Devises rituals by repeating rules and familiar routines • Engages in repetitive themes with play materials
(8 - 9 YEARS) BEGINNINGS OF EXPLORATION AND	DISCOVERY	WATCHING OTHER CHILDREN • Watches peers while remaining close to adults • Begins to wander on play ground • Approaches peers in idiosyncratic fashion • Limited spontaneous interaction with peers • Interacts briefly with peers when frompted	RITUALIZING FAMILIAR ROUTINES • Engages in few different play sequences • Forms attachment to particular doll • Extends familiar routines to self & doll in ritualistic fashion • Uses realistic replicas to represent objects • Lack of advanced pretense & social perspective taking in doll play
(5 -8 YEARS) ALONE IN AN UNPREDICTABLE	WORLD	CLINGING TO ADULTS FOR SECURITY • Attachment to familiar adults • Imitative of adult behavior • Clings to adult on play ground • Shy/fearful around peers • Avoids peer contact • Plays in isolation near adults	CREATING ORDER THROUGH RITUALS • Limited repertoure spontaneous play activities • Fixations on particular objects and routines • Repetitive manipulative and functional play schemes • Doll play Imited to repeated hair combing scheme
		bhoW leico S and od enoitals A	yelq ni enoilemo tenerT

TABLE CONTINUES ON REVERSE SIDE OF PAGE ...



\sim
$\boldsymbol{\tau}$
7.
\mathbf{v}
rontinued
Ξ
_
-
_
-
\circ
_
٠.
ci
Table
_
ъ
=
:.3
_
F
~

ALONE IN AN	O VEADS:		O 11 VEADS		(11 - 15 VEAPS)*
XPL	(8 - 9 TEAKS) BEGINNINGS OF EXPLORATION AND DISCOVERY	VENTUR OF	VENTURING INTO THE WORLD OF CHILDREN'S PLAY	GT3	BEYOND PLAY GROUPS
		nb π $\chi_{VGIII}b$ π π σ ψ	<u>ІРЕД ФЯКПСІРЯПОХ.</u>	дигрер РАКПСТРЯПОХ. РЕЕКЛЕБІЯТЕ РЕСЭ	
ā	DISCOVERING			SYMBOLS IN WORDS	FANTASY IN WORDS
(EAN	MEANING IN WORDS			AND PICTORES	AND PICTURES Count expressions of
mme.	AIND FIC LOKES Immediate and delayed			represent objects, people,	make-believe in writing &
f-dir	self-directed echolalia to			& events	drawing
guide actions	tions			 Self-directed language to 	Spoken language
merg	Emergence of literacy			plan, order, & carry out	exclusively socially
dano	hrough whole language			play scripts	directed
mmersion	ion			 Incorporates writing in 	· Writes stories & draws
)rawi	Drawing progresses from			pretend play activities	picures with logical &
mitiv	orimitive to naturalistic			 Narrative structure in 	coherent themes
reset	representations of human			writing similiar to play	 Incorporates fantasy
ures	figures and familiar objects			scripts	characters in stories
				 Writing more story-like 	· Rich & elaborate detail in
				with peer assistance	drawings
				 Portrays self, others, & 	 Expresses empathy by
				objects realistically in	participating in the feelings
				drawings	& emotions of characters in
				· Drawings detailed with	complex stories
				coherent themes relating to	
				personal experiences	

